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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,039	06/01/2001	Wayne D. Jung	JJL10B	5400

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EXAMINER

KIM, PAUL L

ART UNIT PAPER NUMBER

2857

DATE MAILED: 05/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,039

Applicant(s)

JUNG ET AL.

Examiner

Paul L Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for an earlier priority date of July 9, 1998.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 2-8, 45, and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith et al.

With reference to claims 2-8, Smith teaches a method of spectral analysis (col. 4, lines 3-4) comprising the steps of: providing a first system (fig. 1, part 28), generating commands for the first system by network connection from a second location, (figs. 1, part 36 & col. 4, lines 42-46), transmitting and receiving commands to the first system (fig. 1, part 36), and operating the first system in accordance with the operational commands, where measurements are made in a location remote from the second location in accordance to commands transmitted from the second location (fig. 1).

With reference to claims 45 and 47, Smith teaches a method of spectral analysis for measuring color values comprising the steps of: providing a first system (fig. 1, part 28), making spectral measurements with the first system (figs. 2, part 28), transmitting spectral data produced by the first system to a second remote location and receiving

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spectral data at the second location (figs. 1, part 38 & col. 4, lines 42-46), and providing articles of color characteristics that correspond to spectral measurements made by the first system to the second system (col. 4, lines 35-43).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Wilson et al. With reference to claims 9-27, Smith does not teach the first system performing system diagnosis. Wilson et al teaches a method of diagnosing failures of electronic parts in a computer.

With reference to claim 9, Wilson et al teaches a diagnostic operation of a first system (fig. 2, part 40).

With reference to claims 10-12 and 19-21, Wilson et al teaches providing diagnostic data to an automated testing equipment periodically (col. 1, lines 15-18).

With reference to claims 13 and 22, Wilson et al teaches storing data of a history of operation of the first system (col. 2, lines 5-7).

With reference to claims 14 and 23, Wilson et al teaches using statistical analysis to process data indicative of the history of operation of the first system (col. 2, lines 16-18).

With reference to claims 15 and 24, Wilson et al teaches predicting the need of servicing a component of the first system (fig. 5, part 182).

With reference to claims 16 and 25, Wilson et al teaches servicing that includes system component replacement (col. 3, lines 7-11).

With reference to claims 17, 18, 26, and 27, Wilson et al teaches a message being generated on the first system (col. 4, lines 20-24).

With respect to the above claims 9-27, it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify Smith, so that a component diagnosis can be performed on the first system, as taught by Wilson et al, in order to alert the user of any system malfunctions that may corrupt data.

6. Claims 28-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Fawcett. Fawcett teaches a method of identifying and obtaining computer software from a network.

With reference to claims 28-38, Smith does not teach the software upgrade including bug fixes, color reference data, color and paint reference data, calibration data, signal processing parameter data, materials data, or various dental shade guide data. Fawcett teaches upgrading software over a network (abstract). It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify Smith, so that software upgrades can be made in order to provide up-to-date versions of software releases.

With reference to claim 39, Smith teaches spectral measurements being made within the first system based on processing carried out in accordance with signal processing parameters (col. 4, lines 50-54).

7. With reference to claims 40, 46, and 48, Smith does not teach a plurality of remote systems receiving commands from a second system or performing spectral color measurements. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plurality of system to make spectral measurements since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

8. Claims 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Jung et al. Jung et al teaches a spectral measurement system.

With reference to claim 41, Smith does not teach the first system carrying out a calibration process with respect to relative movement of probe with respect to a calibration standard. Jung et al teaches carrying out a calibration process based on a position of the probe (col. 16, lines 1-7). It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify Smith, so that calibration process could take place based on relative movement of probe in order to make accurate correct color measurements.

With reference to claim 42, Smith does not teach the probe's sensors detecting the physical position of the probe. Jung et al teaches the probe position being sensed (col. 10, lines 31-38). It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify Smith, so that the position of the probe can be sensed in order to help make reliable color measurements.

With reference to claim 43, Smith does not teach the first system making spectral measurements based on calibration and positioning data from the sensors during the calibration process. Jung et al teaches measurements based on calibration and position data of sensors (col. 10, lines 35-38). It would have been obvious to one of ordinary skill in the art, at the time of invention, to modify Smith, so that measurements are based on calibration and position data of sensors in order to make reliable color measurements.

With reference to claim 44, Smith teaches the system at the second location remotely controlling and monitoring data from the first system (fig. 1, part 38).

Response to Arguments

9. Applicant's arguments with respect to claims 1-48 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ismail et al and Lemelson both teach a method of controlling a spectral analyzer from a remote computer.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 703-305-7468. The examiner can normally be reached on Monday-Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 703-308-1677. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-308-9722 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK
April 29, 2002


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800